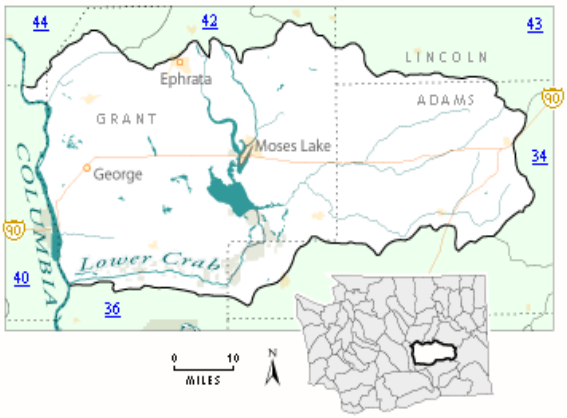
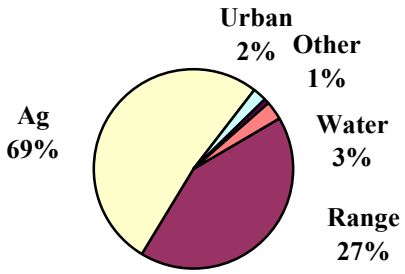
Lower Crab Basin - WRIA #41



WRIA #41 encompasses about 1,622,130 acres. This watershed is located within the Columbia Basin ecoregion. It only averages 6 inches of rain per year.

Demographics

Land use in the Lower Crab Basin



Land Base (in acres)

Federal	276,755	17.1%
State	89,007	5.5%
Local	-0-	-0-
Tribal	-0-	-0-
Private	1,256,368	77.4%

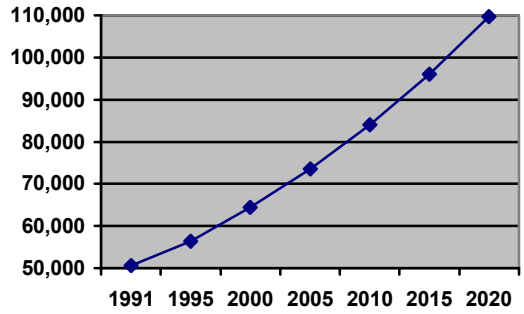
Principal Economic Activity (as total wages)

Agriculture	28%
Manufacturing	16%
Retail Trade	12%
Government	19%
Other	25%

Population

There are approximately 64,435 people living in the Lower Crab Basin. The primary population centers are Moses Lake, Ephrata, and Quincy.

Projected population trends



Counties

Grant (66%) Adams (32%)
Lincoln (2%)

Special purpose districts

Conservation Districts: Upper Grant; Lincoln; Adams; Warden

Irrigation Districts: East Columbia Basin; Quincy-Columbia Basin; Moses Lake Irrigation and Rehabilitation

Principal Cities

Moses Lake	Ephrata
Othello	Quincy
Ritzville	Warden

Reservation Lands

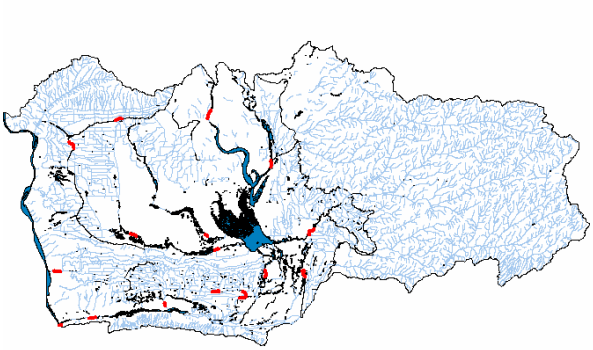
None

General Landscape

The scablands and loess islands were formed as immense floods periodically broke through the ice dams blocking glacial Lake Missoula during the Pleistocene. Soils are typically deep loess on hills and foothills. Potential natural vegetation is big sagebrush, bluebunch wheatgrass, Idaho fescue, and three-tip sagebrush.

Water Quality Summary

303(d) listed waterbodies



1. 303(d) Listed Problem Areas

High Temperature in Crab Creek, Crab Creek Lateral, East Potholes Canal, Frenchman Hills Wasteway, Lind Coulee, Red Rock Coulee, Rocky Ford Creek, Sand Hollow Creek, W645W Wasteway, West Canal, and Winchester Wasteway

Dissolved Oxygen in East Potholes Canal, Lind Coulee, Red Rock Coulee, Rocky Ford Creek, and W645W Wasteway

pH in Crab Creek, Frenchman Hills Wasteway, Lind Coulee, Red Rock Coulee, Rocky Ford Creek, Sand Hollow Creek, and Winchester Wasteway

Pesticides in Crab Creek and Potholes Lake

PCBs in Crab Creek

Total Dissolved Gas in Columbia River

Total Maximum Daily Loads

4 TMDLs required from the 1998 303(d) list

2. Impacted Beneficial Uses

Groundwater Quality

Nitrates – Levels detected > 10 mg/L
Pesticides – Have been detected in public wells.

Sole Source Aquifer

None

Water Quantity

No Concerns

Air Quality

(From windblown dust)
Approximately 117,847 fallow acres yearly

Public Health

Commercial Shellfish Growing Areas
None

Domestic Water Supply
No significant use of surface water sources

Salmonid Stock Status
Healthy

3. Water Quality Programs

1. TMDL for BOR Waterways
2. TMDL for Moses Lake
3. TMDLs for Columbia River
4. Ground Water Management Area (GWMA) plan for the Mid-Columbia, Grant/Benton-Franklin County Health
5. Nitrate Monitoring and Wellhead Protection Program, City of Quincy
6. Othello/Warden Irrigation Management Project
7. Othello Water Quality Project, Othello CD
8. Local Solutions for Nitrate Reduction, Othello CD
9. Dairy Management Program, Othello CD
10. Mid Columbia Watershed Planning, Grant County
11. Weber Coulee Watershed Planning and Implementation, Adams CD
12. Lind Coulee Water Quality Project, Warden CD
13. Rill Irrigation Manure Management Program, Upper Grant CD
14. Bilingual Mobile Irrigation Education Program, Upper Grant CD
15. Implementation Program, Upper Grant CD
16. Dairy Nutrient Management Program, Upper Grant CD
17. Direct Seed Minimum Till Program, Adams CD
18. GWMA Program, Adams CD
19. Fecal Baseline Study, Adams CD
20. Baseline Lower Palouse River Study, Adams CD
21. BMP Implementation Program, Adams CD
22. Nitrate Education Program, Benton-Franklin County Health
23. On-Site Sewage Program, Benton-Franklin/Grant County Health